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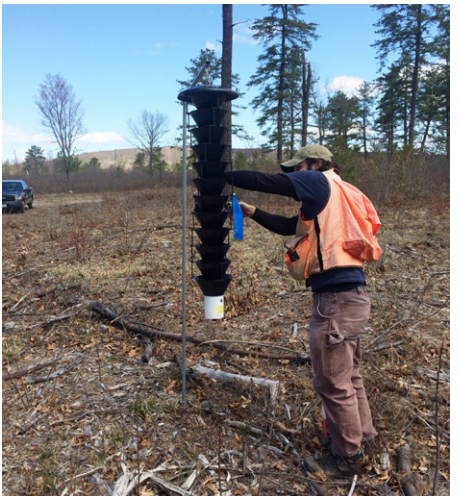
Multi-State Priority Issues in the Northeast and Midwest



Forest Service

Northeastern Area
State and Private Forestry

NA–FR–03–16 July 2017

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Cover photos, clockwise from top left:
A group identifies invasive species at Odiorne Point State Park, NH. (Courtesy photo from Florence Peterson)
A timber bridge spans the Wild River in the White Mountain National Forest, NH. (Courtesy photo by Sherri Wormstead)
A worker attaches southern pine beetle lures to a funnel trap at Montague Plains Weed Management Area, MA. (Courtesy photo by Rebecca DiGirolomo)
A firefighter ignites grasses during a prescribed burn in Massachusetts (Courtesy photo by Massachusetts Department of Conservation and Natural Resources)

Multi-State Priority Issues in the Northeast and Midwest

Philip A. DeSenze, Compiler

United States
Department of Agriculture

Forest Service

Northeastern Area
State and Private Forestry
11 Campus Blvd., Suite 200
Newtown Square, PA 19073

https://www.na.fs.fed.us

July 2017

4283

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Landscape Scale Conservation in the Northeast and Midwest

Background

Landscape scale conservation occurs when multiple landowners pursue common conservation goals, across large blocks of land, to ensure ecosystems are healthy. Conservation on a landscape scale requires both coordination and a commitment across all land ownership types, including private, State, and Federal. All three branches of the Forest Service, U.S. Department of Agriculture, are working together and collaborating with partners towards shared landscape conservation goals. The Northeastern Area State and Private Forestry of the Forest Service (Northeastern Area), is well positioned and authorized to facilitate such efforts.

The Northeastern Area's landscape conservation efforts support the advancement of multi-State priorities included in State Forest Action Plans (National Association of State Foresters 2010). U.S. Secretary of Agriculture Vilsack's "all-lands" policy and the regional position paper, "Landscape Scale Conservation in the Northeast and Midwest" (USDA Forest Service; Northeastern Area Association of State Foresters 2014), also guide our activities. The position paper, developed jointly by the Northeastern Area, Eastern Region of the National Forest System, and Northern Research Station, along with the State Foresters, describes the basis for collaboration among the signatories.

Ultimately, landscape scale conservation allows the Northeastern Area to make the most effective use of resources and program authorities to meet regional conservation goals. This project is intended to enhance Northeastern Area efforts to coordinate assistance and accomplish these goals on a regional scale, in the 20 States of the Northeast and Midwest, as well as the District of Columbia. These efforts contribute strongly to Objective A, Strategy 1, in the Northeastern Area's Strategic Plan, Fiscal Years 2013–2018 (Northeastern Area State and Private Forestry 2013, p. 8):

"A. Contribute to conservation of important forest landscapes across the urban to rural continuum."

"1. Encourage new and support existing landscape-scale partnerships, particularly in multistate priority areas identified in the State Forest Action Plans, to leverage resources and more efficiently achieve results across larger geographic regions."

Project Overview

State forestry agencies identified "multi-State priorities" in their State Forest Action Plans; a summary of these areas and issues was compiled. Updates from annual State accomplishment reporting and interviews with State forest planners were also obtained. All of this information was used to develop comprehensive documents that outline each of the **multi-State priority areas** (DeSenze 2016b) and **multi-State priority issues**, and these documents were provided to partners.

Landscape scale conservation initiatives led by the U.S. Forest Service and other Federal agencies (e.g., Natural Resources Conservation Service, U.S. Department of Agriculture, and Fish and Wildlife Service, U.S. Department of the Interior) were also identified (DeSenze 2016a). Information about such efforts (purpose, scale, contacts, and existing partnerships) was used to create a comprehensive inventory of these initiatives. The Northeastern Area and the Eastern Region of the U.S. Forest Service, using existing geospatial data and the landscape scale conservation inventory, are developing comprehensive maps of priority areas in the region. The inventory and maps are meant to show how each initiative relates to multi-State priorities.

State forest planners met in June 2013 at the annual Forest Resources Planning Committee meeting of the Northeastern Area Association of State Foresters (NAASF), where the documents described above, including the information that follows, were presented. Short workshops facilitated by Northeastern Area staff allowed State forest planners to connect their most important multi-State priorities to existing landscape scale conservation initiatives for enhanced planning and collaborative projects.

The Northeastern Area will use these tools, along with the outcomes of the Forest Resource Planning workshops, to identify how to advance specific multi-State efforts, especially where resources can be leveraged for the greatest return on investment and achieve goals of the Northeastern Area. NAASF and State forestry agencies can use these tools to identify projects to submit for the Northeastern Area's Landscape Scale Restoration competitive grant and other funding opportunities and as tools for regular reviews and updates to State Forest Action Plans.

How to Use This Document

The multi-State priority issues in this document were named in 2010 State Forest Action Plans and in interviews with State forest planners that were completed as a part of this project. Other issues, as noted, may also include information gathered through online research or provided by U.S. Forest Service staff.

- Issues are presented, roughly in order of increasing number of States naming them as multi-State priorities.
- You can navigate to the entry for a particular issue from one of two places: table of contents or the index by State located at the end of the document.
- The entry for each issue includes a description of the issue and a list of States naming it as a multi-State priority. Some entries contain subissues that were also named by States. State names followed by an asterisk (*) are not served by the Northeastern Area.
- "Existing Partnerships" identifies partnerships that were not named in State Forest Action Plans or by State planners but are provided to help advance or address the issue.
- "Opportunities for Partnership, Cooperation, and Projects," are also included where appropriate and available.
- Please feel free to provide comments, additional information, broken hyperlinks discovered in this document, and any other suggestions to the Northeastern Area contact listed below.

Contact: Regional Planner, Northeastern Area, 610-557-4139

References

DeSenze, Philip A. 2016a. Federally led landscape scale conservation initiatives in the Northeast and Midwest. NA-FR-01-16. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Area State and Private Forestry. 116 p. http://www.na.fs.fed.us/sustainability/2016/FederallyLedLSCInitiatives_Final_20160707.pdf. (15 July 2016).

DeSenze, Philip A. 2016b. Multi-State priority areas in the Northeast and Midwest. NA-FR-02-16. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Area State and Private Forestry. 75 p. http://www.na.fs.fed.us/sustainability/2016/MultistatePriorityAreas_Final_20160707.pdf. (15 July 2016).

National Association of State Foresters. [2010] Forest Action Plans. Regional and State. Northeastern Region. Forests and people: Key threats and opportunities. http://www.stateforesters.org/region/northeast. (20 September 2012).

Northeastern Area State and Private Forestry. 2013. Northeastern Area State and Private Forestry Strategic Plan, Fiscal Years 2013–2018. Newtown Square, PA: U.S. Department of Agriculture, Forest Service. 27 p. http://na.fs.fed.us/pubs/detail.cfm?id=280. (20 September 2012).

USDA Forest Service; Northeastern Area Association of State Foresters. 2014. Landscape scale conservation in the Northeast and Midwest. The Foundations of Collaboration for the USDA Forest Service: Eastern Region, Northeastern Area, Northern Research Station, and Forest Products Lab; and the Northeastern Area Association of State Foresters. 18 p. http://na.fs.fed.us/ra/Updated%20LSC%20position%20paper%20FINAL%207-15-14.pdf. (17 September 2014).

Priority Issues

Managing Insects, Diseases, and Invasive Plants

Nonnative and native insects, diseases, and invasive plants have the potential to reduce forest diversity and cause economic and ecological damage to forests. Updated information on these types of organisms was gained through interviews with State forest planners, from Northeastern Area State and Private Forestry (2016 and 2011) State Fact Sheets, and Forest Health Protection surveys

States: Connecticut, Delaware, District of Columbia, Illinois, Indiana, Iowa, Kansas,* Kentucky,* Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi,* Missouri, New Hampshire, New Jersey, New York, North Carolina,* Ohio, Pennsylvania, Rhode Island, South Dakota,* Tennessee,* Vermont, Virginia,* Wisconsin, West Virginia

Insect species specifically referenced for *potential* multi-State efforts

Emerald ash borer

Arkansas,* Colorado,* Connecticut, Delaware, District of Columbia, Georgia,* Illinois, Indiana, Iowa, Kansas,* Kentucky,* Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi,* Missouri, New Hampshire, New Jersey, New York, North Carolina,* North Dakota,* Ohio, Pennsylvania, Rhode Island, Tennessee,* Texas,* Vermont, Virginia,* West Virginia, Wisconsin

Gypsy moth

Connecticut, Delaware, Georgia,* Illinois, Indiana, Iowa, Kentucky,* Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina,* Ohio, Pennsylvania, Rhode Island, South Carolina,* Tennessee,* Vermont, Virginia,* Wisconsin, West Virginia

Asian longhorned beetle

Connecticut, Delaware, District of Columbia, Illinois, Indiana, Iowa, Maine, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Rhode Island, Vermont, Wisconsin

Hemlock woolly adelgid

Connecticut, Georgia,* Indiana, Kentucky,* Maine, Maryland, Massachusetts, Michigan, North Carolina,* New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Tennessee,* Vermont, West Virginia, Wisconsin

Winter moth

Connecticut, Delaware, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia

Elongate hemlock scale

Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island, West Virginia

Southern pine beetle

Delaware, Maryland, Massachusetts, Michigan, Mississippi,* New Jersey, New York, Ohio, Rhode Island, Tennessee,* Texas,* Virginia,* West Virginia

Spruce budworm

Maine, Michigan, Minnesota, New Hampshire, New Jersey, New York, Vermont, West Virginia

Sirex woodwasp

Connecticut, Delaware, Maine, Maryland, New Jersey, New York

Forest tent caterpillar

New Hampshire, New York, Pennsylvania

Red pine scale (rust)

Massachusetts, New Hampshire, Vermont

Orangestriped oakworm

Connecticut, Rhode Island

Diseases specifically referenced for *potential* multi-State efforts

Oak wilt

Arkansas,* Kansas,* Kentucky,* Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi,* Missouri, Nebraska,* New Hampshire, New Jersey, New York, North Carolina,* Ohio, Oklahoma,* Pennsylvania, Rhode Island, South Carolina,* South Dakota,* Tennessee,* Texas,* Vermont, Virginia,* West Virginia, Wisconsin

Thousand cankers disease

Alabama,* Delaware, Florida,* Kansas,* Illinois, Indiana, Iowa, Louisiana,* Maryland, Massachusetts, Michigan, Minnesota, Mississippi,* Missouri, Nebraska,* New Hampshire, New Jersey, New York, North Carolina,* Ohio, Oklahoma,* Pennsylvania, South Carolina,* South Dakota,* Tennessee,*

Texas,* Vermont, Virginia,* West Virginia, Wisconsin

Beech bark disease

Connecticut, Delaware, Indiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, Wisconsin

Butternut canker

Illinois, Indiana, Iowa, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New York, Ohio, Pennsylvania, Vermont, West Virginia, Wisconsin

Dutch elm disease

District of Columbia, Illinois, Iowa, Minnesota, Ohio, Wisconsin

Sudden oak death

Connecticut, Illinois, Iowa, Minnesota, New York, Wisconsin

Bacterial leaf scorch

Delaware, District of Columbia, New Jersey

White pine blister rust

Iowa, Minnesota, Wisconsin

White pine needle cast

Maine, New Hampshire, Vermont

Anthracnose disease (sycamore)

Connecticut, Delaware

Bur oak disease

Iowa, Minnesota

White oak decline

Delaware, Missouri

Invasive Plants

Examples of invasive plants of concern include European buckthorn, garlic mustard, Japanese stilt grass, and reed canary grass. Objectives for combating invasive plants include prevention and eradication strategies, and involved efforts within multiple Cooperative Weed Management Areas. There is also a Midwestern Invasive Plant Network (aquatics led by U.S. Fish and Wildlife Service) (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin), which is a regional organization of land managers, resource professionals, landowners, and private citizens dedicated to reducing the impact of invasive plant species. Finally, the Northeastern Forest Fire Compact has expanded its use of the collaborative structure already in place to prevent and fight forest fires in order to combat insects, diseases, and invasive plants

that threaten forest health.

Existing Partnerships:

Aquatic Nuisance Species Task Forces

- Great Lakes Panel on Aquatic Nuisance Species
- Mid-Atlantic Panel on Aquatic Invasive Species
- Mississippi River Basin Panel on Aquatic Nuisance Species
- Northeast Aquatic Nuisance Species Panel

Cooperative Weed Management Areas

Midwestern Invasive Plant Network

Northeastern Forest Fire Compact

Opportunities for Partnership, Cooperation, and Projects:

- A cooperative approach to costly survey, detection, and eradication efforts that focus on infestations that pose the greatest threats to natural resource values are the highest priority.
- Invasive species best management practices can be completed and shared across States, while educating and instructing foresters, landowners, and land managers to detect and control invasive species.
- Cooperating to conduct coordinated survey and detection work is a multiyear task.
- Monitoring for the spread of insects and plants as well as evaluating the threat to natural resources can be shared across landscapes.
- Rehabilitation of lands and forests adversely impacted by invasive plants and insects is crucial.

References:

Northeastern Area State and Private Forestry. 2011, July 11. Forest Health Protection: Technical assistance. http://na.fs.fed.us/fhp/ta/index.shtm. (14 July 2016).

Northeastern Area State and Private Forestry. 2016, July 1. Reports and achievements: State fact sheets. https://www.na.fs.fed.us/ra/ra.shtm. (14 July 2016).

Reducing Wildfire Risk

Threats to forests and public safety from wildfire are addressed by individual compacts listed below, including the Big Rivers Forest Fire Management Compact, Great Lakes Forest Fire Compact, Mid-Atlantic Fire Compact, and the Northeastern Forest Fire Protection Commission. States also named the National Cohesive Wildland Fire Management Strategy as a subissue and partnership. There is also a Fire Activity and Emissions Tracking System effort underway by several Mid-Atlantic and Southern States. Fire management practices may be integrated into overall forest management strategies while also serving to address wildfire risk areas.

States and Provinces: Alabama,* Arkansas,* Florida,* Georgia,* Illinois, Indiana, Louisiana,* Maine, Manitoba,* Maryland, Michigan, Minnesota, Missouri, New York, North Carolina,* Ohio, Ontario,* Pennsylvania, South Carolina,* Vermont, West Virginia, Wisconsin

National Cohesive Wildland Fire Management Strategy

The National Cohesive Wildland Fire Management Strategy is a collaborative process with active involvement of all levels of government and nongovernmental organizations, as well as the public, to seek national, all-lands solutions to wildland fire management issues. The Wildland Fire Leadership Council was established in April 2002 by the U.S. Secretaries of Agriculture and the Interior, to provide an intergovernmental committee to support the implementation and coordination of Federal Fire Management Policy. The National Strategy is implemented through three Regional Strategy Committees; the Northeast Regional Strategy Committee is working on this across the Northeast and Midwest.

Northeastern Forest Fire Protection Commission

The Northeastern Forest Fire Protection Commission provides the means for its member States and provinces to cope with fires that might be beyond the capabilities of a single member through information, technology, and resource sharing (mutual aid) activities. Additional activities include a regional forest pest network for monitoring purposes and related collaboration.

States and Provinces: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont, Quebec,* New Brunswick,* Newfoundland Labrador,* Nova Scotia*

Commission contains all or portions† of the following America's Great Outdoors priorities:

Landscapes of National Significance

- Connecticut River Watershed National Blueway (Connecticut; Massachusetts; New Hampshire; Vermont; Green Mountain National Forest, VT; White Mountain National Forest, NH)

- Great Lakes† (Illinois, Indiana, Michigan, Minnesota, Ohio, New York, Wisconsin)
- New England Forests and Waters (Maine; New Hampshire; Vermont; Green Mountain National Forest, VT; White Mountain National Forest, NH)
- Penobscot River Restoration Project (Maine)

Rivers and Water Trails

- Naugatuck River Greenway (Connecticut)
- Blackstone River Valley Greenway (Massachusetts, Rhode Island)
- Bronx River National Water Trail (New York)
- Finger Lakes Water Trail (New York)
- Winooski River – Conservation for Flood Resilience (Vermont)

Great Urban Parks and Wildlife Areas

- New York City – Jamaica Bay Great Urban Park (New York)
- Harlem River – Roberto Clemente State Park (New York)

Signature Landscape (pilot)

- Lake Champlain (New York; Vermont; Green Mountain National Forest, VT)

Compact contains the following Urban Waters Federal Partnerships:

- Bronx and Harlem River Watersheds – New York, NY
- Mystic River Watershed – Metropolitan Boston, MA

Mid-Atlantic Fire Compact

Numerous joint activities are conducted within this existing multi-State organization. These activities are encompassed by Federal grants in Firewise, State Fire Assistance, Volunteer Fire Assistance, and other special grants, and typically involve efforts in fire prevention, detection, and suppression.

States: Delaware, Maryland, New Jersey, Ohio, Pennsylvania, Virginia,* West Virginia

Compact contains all or portions† of the following America's Great Outdoors priorities:

Landscapes of National Significance

- Captain John Smith Chesapeake National Historic Trail† (District of Columbia, Delaware, Maryland, Virginia*)
- Delaware National Bayshore (Delaware)
- Great Lakes† (Illinois, Indiana, Michigan, Minnesota, Ohio, New York, Wisconsin)

Landscapes of Regional Significance

- Barnegat Bay Landscape Preservation and Recreation/Water Access (New Jersey)
- Grand Lake St. Mary's Watershed Wetland Development (Ohio)
- Northeast Ohio Wetland Restoration (Ohio)
- Ohio to Erie Trail Connection (Ohio)
- Canaan Valley National Wildlife Refuge (West Virginia)

Rivers and Water Trails

- Anacostia River Restoration† (District of Columbia, Maryland)
- Nanticoke River – Captain John Smith Chesapeake Connecting Trail (Delaware)
- Chester River – Captain John Smith Connecting Trail (Maryland)
- Delaware River Restoration (New Jersey)
- Sulphur Springs Stream Restoration (Ohio)
- Lower Susquehanna River Initiative and Captain John Smith Connecting Water Trail (Pennsylvania)
- Ohio River Native Mussel Recovery (West Virginia)
- New River Gorge National River (West Virginia)

Great Urban Parks and Wildlife Areas

- Pittsburgh and Philadelphia Urban Greening (Pennsylvania)
- Harriet Tubman Underground Railroad National Historic Park (in Fifty-State report; U.S. Department of the Interior, 2011) (Maryland)

Early Pilot Landscape

- Monongahela National Forest, WV

Compact contains the following Urban Waters Federal Partnerships:

- Patapsco River Watershed – Baltimore, MD (2011 pilot)
- Anacostia River Watershed – District of Columbia and Maryland (2011 pilot)
- Delaware River Watershed – Philadelphia, PA; Camden, NJ; Wilmington, DE (led by U.S. Forest Service) (2013 Partnership)
- Passaic River Watershed – Newark, NJ (2013 Partnership)
- Western Lake Erie Basin – Toledo, OH (2013 Partnership)

Great Lakes Forest Fire Compact

The Great Lakes Forest Fire Compact is an association that promotes effective prevention, suppression and control of forest fires in the Great Lakes Region of the United States and adjacent areas of Canada.

States and Provinces: Michigan, Minnesota, Wisconsin, Manitoba,* Ontario*

Compact contains all or portions† of the following America's Great Outdoors priorities:

Landscapes of National Significance

- Great Lakes† (Illinois, Indiana, Michigan, Minnesota, Ohio, New York, Wisconsin)
- Mississippi River Bluffs* (Iowa, Illinois, Minnesota, Wisconsin)

Landscapes of Regional Significance

- Hackmatack National Wildlife Refuge† (Illinois, Wisconsin)
- Ice Age Trail (Wisconsin)

Rivers and Water Trails

- Detroit River Restoration (Michigan)
- Mississippi National River and Recreation Area (Minnesota)
- Minnesota River Blueway (upper corridor) (Minnesota, South Dakota*)
- Lake Michigan Water Trail† (Illinois, Indiana, Michigan, Wisconsin)
- Milwaukee River Restoration and Fish Passage (Wisconsin)

Signature Watershed (*pilot*)

- Saginaw Bay (Michigan; Huron-Manistee National Forest, MI)

Compact contains the following Urban Waters Federal Partnership:

- Grand River Watershed – Grand Rapids, MI (2013 Partnership)

Big Rivers Forest Fire Management Compact

This compact encompasses the major rivers found in Illinois, Indiana, Iowa, and Missouri. Members of the compact share information about wildfire prevention and the Firewise programs, as well as operations, training, and mutual aid information.

States: Illinois, Indiana, Iowa, Missouri

Compact contains all or portions† of the following America's Great Outdoors priorities:

Landscapes of National Significance

- Mississippi River Bluffs† (Iowa, Illinois, Minnesota, Wisconsin)

Landscapes of Regional Significance

- Southern Prairie Potholes National Wildlife Refuge (Iowa)
- Loess Hills (Iowa)
- Hackmatack National Wildlife Refuge† (Illinois, Wisconsin)
- Ozark Trail (State and National Forest System land) (Missouri)

Rivers and Water Trails

- Big Sioux River Fish Passage and Recreation (Iowa, Minnesota, South Dakota*)
- Pecatonica River Water Trail (Illinois)
- Wabash River Healthy Rivers Initiative (Indiana)

Great Urban Parks and Wildlife Areas

- Indiana Dunes (Indiana)
- Memorial Arch and Mississippi River in St. Louis (Jefferson National Expansion Memorial Revitalization) (Illinois, Missouri)

Early Pilot Landscape

- White River Blueway† (Arkansas;* Missouri; Mark Twain National Forest, MO)

Compact contains the following Urban Waters Federal Partnerships:

- Lake Michigan and Little Calumet River – Northwest Indiana (2011 pilot)
- Meramec and Big River Watershed – St. Louis, MO (2013 Partnership)
- Middle Blue River Watershed – Kansas City, MO (2013 Partnership)

Opportunities for Partnership, Cooperation, and Projects:

- Hazard Mitigation and Prescribed Burning – Activities focus on hazardous fuels reduction, development and implementation of Community Wildfire Protection Plans, prevention and mitigation education, Firewise programming, and community hazard mitigation. Prescribed burning is used to achieve multiple objectives, including hazard mitigation; ecosystem maintenance, restoration, or both; control of invasives and wildlife habitat improvement; silviculture practices such as site preparation and oak regeneration; management activities for rare, threatened, and endangered species; watershed management; and forest health practices.
- Cooperative Agreements – State strategies should also identify the existence of any cooperative agreements for suppression activities on Federal lands.

References:

U.S. Department of the Interior. 2011. America's Great Outdoors: fifty-State report. Washington, DC. 117 p. https://www.doi.gov/sites/doi.gov/files/migrated/news/pressreleases/upload/ago50statereport.pdf. (6 May 2016)

Sustaining Forest Industry and Diversifying Markets

The ability to effectively maintain and manage the region's forests and sustain rural forest-based communities is based in part on sustaining and diversifying forest product markets. Without this, it will be extremely difficult to manage forests in a sound, scientific manner. This issue also includes consideration of markets for utilizing urban wood waste. Additionally, the loss of forest products industries and markets constrains opportunities to manage forests and diminishes options for the production and enhancement of an array of ecosystem services.

States: Alabama,* Florida,* Illinois, Iowa, Kentucky,* Michigan, Minnesota, Missouri, New Hampshire, New York, North Carolina,* Pennsylvania, Rhode Island, South Carolina,* Texas,* Vermont, West Virginia, Wisconsin

Existing Partnerships:

Michigan

- Michigan Forest Management Advisory Committee
- Michigan Forest Stewardship Advisory Committee
- Michigan Forest Products Council
- Michigan Association of Timbermen
- Lake States Lumber Association
- Michigan Sustainable Forestry Initiative
- Biomass Utilization and Restoration Network in the Upper Peninsula (BURN-UP)
- Michigan Forest Resource Alliance

Minnesota

- University of Minnesota, Duluth – Natural Resources Research Institute
- Blandin Foundation
- Minnesota Forest Industries
- Minnesota Forestry Association
- Minnesota Forest Resources Council, Governor's Forestry Subcabinet (Growing Our Forests Initiative)

Wisconsin

- Wisconsin County Forests Association
- Great Lakes Timber Professionals Association
- Governor's Council on Forestry

- Wisconsin Woodland Owners Association
- Wisconsin Consulting Foresters
- Wisconsin Paper Council

Promoting Sustainable, Active Private Forest Management

A significant amount of private forestland across the region is unmanaged or undermanaged. Promoting sustainable active management of private forest lands can help to offset the rising costs of forest ownership while contributing to the health, resiliency, and productivity of the region's forests. States named "Call Before You Cut Programs" as a subissue and partnership.

States: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, New York, Ohio, Vermont, West Virginia, Wisconsin

Call Before You Cut Programs

Call Before You Cut Programs (listed by Illinois, Indiana, Iowa, Minnesota, Missouri, Ohio, and West Virginia) provide information to landowners about proper timber sale contracts, encourage private landowners to contact professional foresters for advice or assistance with timber harvesting and forest management activities, and advise landowners to seek reputable loggers for timber sales.

Opportunities for Partnership, Cooperation, and Projects:

- Most States have nongovernmental woodland owner organizations that encourage woodland stewardship and provide educational opportunities. Supporting or otherwise partnering with these organizations can help to increase their effectiveness.
- Cooperation with forestry extension could be expanded to help reach and educate landowners and to inform them of landowner assistance opportunities with State and Federal agencies.
- Peer-to-peer networks of forest landowners have proven very effective at conveying forest management information to private woodland owners who might otherwise be reluctant to take advantages of opportunities presented by well-intentioned "strangers."

Responding to Impacts of Climate Change

Important questions exist about the impact that potential changes in climate will have on forest resources. Many natural resource agencies within the region are interested in collaborating and sharing information in order to produce assessments that will provide managers and policymakers with the information needed to decide how to respond to impacts of climate change. The Wisconsin Initiative on Climate Change Impacts is an example that could be expanded further.

States: Alabama,* Connecticut, Florida,* Maryland, Massachusetts, Minnesota, Mississippi,* New Hampshire, New Jersey, North Carolina,* Texas,* Vermont, West Virginia, Wisconsin

Existing Partnerships:

- Regional Greenhouse Gas Initiative is the first market-based regulatory program in the United States designed to reduce greenhouse gas emissions. States sell nearly all emission allowances through auctions and invest proceeds in consumer benefits like energy efficiency, renewable energy (i.e., biomass), and other clean energy technologies. Nine States served by the Northeastern Area are participating (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, Vermont).
- Climate Change Response Framework (CCRF) projects are underway in 19 States served by the Northeastern Area, all led by the U.S. Forest Service's Northern Institute of Applied Climate Science.
  - Central Appalachians CCRF (Maryland, Ohio, West Virginia)
  - Central Hardwoods CCRF (Illinois, Indiana, Missouri)
  - Mid-Atlantic CCRF (Delaware, Maryland, New Jersey, New York, Pennsylvania)
  - New England CCRF (Connecticut, Massachusetts, Maine, New Hampshire, New York, Rhode Island, Vermont)
  - Northwoods CCRF (Michigan, Minnesota, Wisconsin)
  - Urban Forestry CCRF (Chicago metropolitan Area – Illinois, Indiana, Michigan, Wisconsin)

Opportunities for Partnership, Cooperation, and Projects:

- Of the 20 States served by the Northeastern Area, 17 States as well as the District of Columbia have produced a climate change adaptation action plan (Center for Climate and Energy Solutions, n.d.). Most States did so in response to explicit legislation directing such activity, and all efforts were collaborative across different levels of government, State agencies, nongovernmental organizations, and industry.

- In Maryland, storm damage is dominating staff time and silviculture efforts. Storms include ice events, tornados, and Superstorm Sandy. All require the State to delineate the affected area(s) while attempting to salvage down and dead trees and repair the forest ecosystem. There is a lack of good information for landowners and State staff. West Virginia, however, has a packet available to help landowners deal with salvage and to provide a model for other States to use.

Reference:

Center for Climate and Energy Solutions. [n.d.] Climate action plans. Arlington, VA. c2es.org/us-states-regions/policy-maps/climate-action-plans. (9 May 2016).

Foresting, Reforesting, and Restoring Diminished Species

Healthy forests are essential for providing a broad range of ecosystem goods and services. Forestation and reforestation involve maintaining a balance of the many forest types within the landscape and are increasingly difficult due to the many interests of various forest landowners and managers. Also, many forest types are becoming increasingly difficult to maintain or regenerate due to factors such as climate change, disease, insect outbreaks, lack of fire disturbance, deer browsing, and invasive plants. Diminished species restoration was cited for certain tree species, which includes State Nursery and National Seed Laboratory efforts for restoration of tree species under threat, such as ash seed banking. Subissues named by States are American Chestnut Restoration, Atlantic White Cedar Restoration, Oak Decline and Restoration, and Shortleaf Pine Decline.

States: Alaska,* Arkansas,* Indiana, Illinois, Iowa, Maryland, Minnesota, Missouri, New Jersey, New York, North Carolina,* Oklahoma,* Tennessee,* Virginia,* Wisconsin

Existing Partnerships:

Appalachian Forest Renewal Initiative

Appalachian Regional Reforestation Initiative

Collaborative Forest Landscape Restoration Program

New England – New York Forestry Initiative

Opportunities for Partnership, Cooperation, and Projects:

- Wildlife habitat considerations drive many reforestation efforts. By partnering with wildlife agencies and nongovernmental wildlife interests, forest managers might increase opportunities for mutually beneficial tree planting efforts.
- Water quality issues provide opportunities for nontraditional partnerships with local water commissions and other organizations. Establishment and expansion of riparian forest buffers provide opportunities to increase tree cover while providing clean drinking water.
- The current interest in carbon markets and carbon sequestration creates an opportunity to increase tree cover and provide other ecosystem benefits while achieving the goal of increasing carbon storage and sequestration.
- The Natural Resources Conservation Service offers a variety of programs to offset the costs of forest establishment for a variety of purposes including enhancing wildlife habitat and active forest management

- Maryland is attempting to restore red spruce and is working with West Virginia on this and the restoration of other rare species and communities.

American Chestnut Restoration

State forestry efforts in cooperation with the American Chestnut Foundation, universities, and U.S. Forest Service research are focused on restoration of the American chestnut. (New Jersey, Virginia*)

Atlantic White Cedar Restoration

Atlantic white cedar grows in freshwater wetlands along the coast from southern Maine to northern Florida and west to southern Mississippi. The population has steadily declined from its historical range due to development, fire, deer browsing, lack of proper management, and other factors. Multi-State cooperation and funding could assist in expanding restoration work into suitable private lands. (New Jersey, Virginia*)

Oak Decline and Regeneration

Oak is an important component of diverse natural forests across several States. Oak is valuable as wildlife habitat, providing food and shelter for over 90 game and nongame wildlife species. Oak is also important to the forestry industry and to people in general, for a variety of oak-derived products. (Arkansas,* Indiana, Tennessee*)

Shortleaf Pine Decline

Shortleaf pine has been in decline across much of its range for decades due to extensive harvesting, conversion to loblolly pine, and land-use changes. Efforts are underway to maintain and reestablish shortleaf pine as a viable silviculture option across its natural range. (Arkansas,* Missouri, North Carolina,* Oklahoma,* Virginia*)

Maintaining Wildlife Biodiversity and Forested Habitats

Forests provide essential habitats for plant and animal species, including threatened and endangered species. Concerns include change in forest diversity and structure as a result of climate change, forest fragmentation and loss of corridors, invasive species, loss of early successional habitat, wildlife browsing on forest plants, loss of forested riparian zones due to increasing urban development, and maintaining habitats for migratory species. Partnerships with Federal and State wildlife agencies, National Forests, universities, and conservation groups are important for addressing this issue. The Indiana bat is one conservation species that was specifically referenced. National Fish Habitat Action Plan Partnerships named by States also constitute a subissue.

States: Connecticut, Indiana, Massachusetts, Michigan, Missouri, New York, Ohio, Vermont, Wisconsin

National Fish Habitat Action Plan Partnerships

The plan was developed in 2001 when an ad hoc group supported by the Sport Fishing and Boating Partnership Council explored the notion of developing a partnership effort for fish, on the scale of what was done for waterfowl in the 1980s through the North American Waterfowl Management Plan.

States: Indiana, Wisconsin

Existing Partnerships:
Regional Fish Habitat Action Plan Partnerships (FHP) include:

- Atlantic Coastal FHP
- Driftless Area Restoration Effort FHP
- Eastern Brook Trout Joint Venture FHP
- Fishers and Farmers FHP for the Upper Mississippi River Basin
- Great Lakes Basin FHP
- Great Plains FHP
- Midwest Glacial Lakes FHP
- Ohio River Basin FHP
- Southeast Aquatic Resources FHP

Aquatic Organism Passage

Regional Migratory Bird Joint Ventures include:

- Appalachian Mountains Joint Venture

- Atlantic Coast Joint Venture
- Central Hardwoods Joint Venture
- Prairie Pothole Joint Venture
- Upper Mississippi River and Great Lakes Region Joint Venture

Opportunities for Partnership, Cooperation, and Projects:

- Regional approaches to mitigate impacts to forests from climate change can maintain species diversity.
- Cooperative work with State wildlife agencies can focus on priority habitats to protect and manage.
- Advocacy organizations that address hunting, birding, fishing, photography, hiking, and other outdoor activities have interests in protecting and maintaining species richness and wildlife habitats.
- Involvement increases awareness of and engagement with Landscape Conservation Cooperatives, led primarily by the U.S. Fish and Wildlife Service.

Utilizing Biomass for Renewable Energy

Using wood biomass resources sustainably is a critical challenge that includes renewable energy and the accompanying markets for woody biomass. Issues involve supply availability, impact on regional and national carbon balances, emissions affecting air quality (e.g., particulates) and climate (e.g., CO_2), effective incentive programs, and State and Federal regulations. Some related efforts include the (1) Tri-State Forest Summit (Illinois, Michigan, Wisconsin) coordination on biomass harvesting guidelines and location and development of bioenergy projects, and (2) Mid-Ohio River Valley Biomass Feedstock Zone and Project (Ohio, West Virginia). See the biomass project description in Multi-State Priority Areas in the Northeast and Midwest (DeSenze 2016, p. 40).

States: Connecticut, Maine, Michigan, Minnesota, New York, Ohio, Vermont, West Virginia

Existing Partnerships:

Mid-Ohio River Valley Biomass Feedstock Zone and Project (Ohio, West Virginia)

Tri-State Forest Summit (Illinois, Michigan, Wisconsin)

Opportunities for Partnership, Cooperation, and Projects:

Wood Education and Resource Center efforts provide opportunities.

Reference:

DeSenze, Philip A. 2016. Multi-State priority areas in the Northeast and Midwest. NA-FR-02-16. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Area State and Private Forestry. 75 p. na.fs.fed.us/sustainability/2016/MultistatePriorityAreas_Final_20160707.pdf.

Managing Forested Watersheds for Water Quality

Protecting and managing forested watersheds is essential to providing clean water. This issue is complex since units of government, from local to Federal, and public and private forest landowners along the urban and rural continuum are all critical for addressing water quality issues in forested watersheds that cross State boundaries. Examples include watersheds along the Interstate-95 corridor, Lake Superior Basin, St. Lawrence Basin Water Resources Compact, Western Lake Erie Partnership, and several additional watersheds. A subissue that was named is Addressing Hypoxia in the Gulf of Mexico.

States: Connecticut, Indiana, Illinois, Michigan, Minnesota, New York, North Carolina,* Vermont

Existing Partnerships:

Chesapeake Bay Watershed Initiative

Driftless Area Landscape Conservation Initiative

Great Lakes Restoration Initiative

Middle Mississippi River Partnership

Mississippi River Basin Healthy Watersheds Initiative

National Water Quality Initiative

Red River Basin Initiative

Urban Waters Federal Partnership

Upper Mississippi River Forestry Partnership

Opportunities for Partnership, Cooperation, and Projects:

- Estate planning workshops guide landowners to the resources necessary to successfully transfer forest lands to the next generation of landowners, thereby keeping forest as forest.
- The Watershed Forest Management Information System developed with a Northeastern Area grant can be used to focus Forest Stewardship Program planning activities on the most important forested parcels in a watershed.
- The Best Management Practices Protocol measures the implementation and effectiveness of Best Management Practices to protect water quality during forest management operations.
- Storm water management efforts by communities assist in reducing pollution into major rivers.

Addressing Hypoxia in the Gulf of Mexico

Hypoxia is an environmental phenomenon in which the concentration of dissolved oxygen in the water column decreases to a level that can no longer support living aquatic organisms. The largest hypoxic zone currently affecting the United States and the second largest worldwide is the northern Gulf of Mexico adjacent to the Mississippi River. (Indiana)

Valuing Ecosystem Services

Ecosystem services, as a conservation framework, recognize forest ecosystems as natural assets with economic and social value that can be used to promote more responsible decisionmaking. The ability to communicate and capture the financial value of ecosystem services may help landowners—who currently do not benefit from the true value of their land and all of the public goods and services forests provide—to keep their forests forested.

States: Illinois, Iowa, Minnesota, Missouri, New York, Wisconsin

Opportunities for Partnership, Cooperation, and Projects:

- Cross agency (Federal and State) cooperation in partnership with land trusts, private landowners, and communities can identify important landscapes to protect and manage. Community officials who are educated on forest conservation and have good planning tools to use can decide on zoning ordinances and practices that benefit forests and watersheds. Working with urban communities to promote and implement healthy trees and urban forests can contribute to improved air and water quality, watershed function, energy conservation, and social well-being.
- Regulations, land acquisitions, conservation easements, and tax incentives are some of the conservation approaches that aim to protect and conserve the Nation's forests and grasslands. Over the past decade, advances in sustainable forest management and forest certification have complemented conservation objectives. Traditional conservation programs, however, may not be enough to safeguard natural landscapes and biodiversity; and traditional markets alone may not provide landowners with a sufficient economic incentive to own and sustainably manage forestland. To reverse the loss and degradation of ecosystem services, economic and financial motivations must include a conservation objective, and the value of ecosystem services needs to be incorporated into any decisionmaking.
- Emerging approaches to conservation may financially compensate landowners for providing ecosystem services. Markets and payments for carbon sequestration, watershed management, green infrastructure, ecotourism, and a host of other services may supplement traditional forest revenues and promote good stewardship, especially when used together with other conservation tools. New revenue streams from natural resources might help forest owners cover the costs of owning forestland and provide them with incentives to retain ownership of their land and manage it sustainably. Green infrastructure practices are gaining popularity, particularly in areas with more extreme stormwater management issues. Following are examples including projects of this type:
  - Great Lakes Restoration Initiative
  - U.S. Forest Service Valuing Ecosystem Services

- U.S. Environmental Protection Agency Ecosystem Services Research Program
- Conservation Marketplace of Minnesota
- Integrated Valuation of Ecosystem Services Tool (INVEST)
- Markets for Ecosystem Services, Fiscal Years 2012, 2013, 2014 (Northeastern Area State and Private Forestry 2013a, 2013b, 2014)

References:

Northeastern Area State and Private Forestry. 2013a. Markets for ecosystem services: trading benefits provided by forests and trees, Fiscal Year 2012. Newtown Square, PA: U.S. Department of Agriculture, Forest Service. 1 sheet. http://www.na.fs.fed.us/ra/specialinitiatives/ecosystem/markets-ecosystem-services-fiscal-year2012.pdf. (6 May 2016)

Northeastern Area State and Private Forestry. 2013b. Markets for ecosystem services: trading benefits provided by forests and trees, Fiscal Year 2013. Newtown Square, PA: U.S. Department of Agriculture, Forest Service. 1 sheet. https://www.na.fs.fed.us/ra/specialinitiatives/2014/4281_MarketsForEcosystemServicesFiscalYear2013_140102.pdf. (6 May 2016)

Northeastern Area State and Private Forestry. 2014. Markets for ecosystem services: trading benefits provided by forests and trees, Fiscal Year 2014. Newtown Square, PA: U.S. Department of Agriculture, Forest Service. 1 sheet. https://www.na.fs.fed.us/ra/SpecialInitiatives/2014/5046_OKM_FPB_FY14EcosystemMarkets_FINAL_150107.pdf. (6 May 2016)

Addressing Threats to Forests Along Highway Corridors

Rampant, unplanned development along major interstate highway corridors, such as I-64, I-68, I-77, I-79, I-81, and I-95, is causing a variety of natural resource problems. Among these are fragmentation and parcelization of forests, water quality issues, and the spread of invasive plants and insects.

States: Connecticut, District of Columbia, Kentucky,* Maryland, New Jersey, Pennsylvania, West Virginia

Keeping Forest as Forest and Intergenerational Transfer of Land

Concerns include loss of forest land and increased forest fragmentation due to increased development, uncertain forest product markets, and change in private forest land ownership. Intergenerational transfer of land often leads to forest fragmentation and land conversion, when family owned forest land is transferred from one generation to the next. More than half of private woodland owners are 65 years old or older, while increasing land values enhance the pressure for families to sell or subdivide forested land.

States: Connecticut, Massachusetts, New York, Rhode Island, Vermont

Opportunities for Partnership, Cooperation, and Projects:

- The Next Generation of Landowners Initiative is encouraging discussions and estate planning that will ensure the future of working family lands, though decisions about the future of the forested landscape in New England remains with its hundreds of thousands of woodland owners.
- The Sustaining Family Forests Initiative has developed Tools for Engaging Landowners Effectively.

Collecting Forest Inventory and Analysis Data in Urban Areas

Continuous inventory data is lacking for urban forests, thus limiting the ability of State and regional managers to track conditions and trends. The U.S. Forest Service's Forest Inventory and Analysis Program (FIA) provides the information needed to assess America's forests. FIA reports annually on forest area; the species, size, and health of trees; tree growth, mortality, and removals; wood production and utilization rates by various products; and forest land ownership. The Urban FIA Program, an extension of FIA, includes urban areas. It uses i-Tree tools to report data about urban trees, tree merchantability and quality, insect and disease detection, and ecosystem services information. As Urban FIA is implemented in cities across the country, the data and reports will be available on the Urban FIA Program Web site. In addition, the My City's Trees Application provides a way to customize data collection and display them spatially.

States: District of Columbia, Minnesota, Missouri, New York, Wisconsin

Conducting Outreach and Conservation Education

Collaboration and sharing of ideas, products, and resources to reach common audiences can be efficient and effective uses of limited resources. One specific effort, the Mid-Atlantic Conservation Education cooperative, very active from 1995 to 2005, was focused on elevating the overall quality and quantity of conservation education activities and programs in the Mid-Atlantic States. There is some interest in renewing this effort.

States: Massachusetts, New York, North Carolina,* Pennsylvania, Vermont, West Virginia

Increasing Urban Tree Canopy Cover and Green Infrastructure

Canopy cover in urban areas and green infrastructure across the urban to rural continuum is important for environmental benefits. Green infrastructure is the interconnected network of open spaces and natural areas, such as greenways, wetlands, parks, urban forests and native plant vegetation that naturally manage storm water, reduce flooding risk, and improve air and water quality. Additional benefits include energy efficiency and community cohesiveness.

States: Connecticut, Iowa, New York, North Carolina,* Vermont

Opportunities for Partnership, Cooperation, and Projects:

- Green Infrastructure Foundation works with Green Roofs for Healthy Cities to deepen and broaden public awareness of the multiple benefits of green roofs, green walls, and urban forests as part of the built environment.
- These efforts could be coordinated through the NAASF Urban and Community Forestry Committee.

Reforesting Previously Mined Lands

Many acres of forests on previously mined lands are in need of reforestation. For example, the West Virginia Division of Forestry has been communicating with other State and Federal agencies, the West Virginia Coal Association, neighboring State forestry agencies, and others in an effort to replant trees and encourage natural regeneration. Pennsylvania has over 200,000 acres of abandoned mine lands and is interested in cooperating on this issue as opportunities arise.

States: Kentucky,* Ohio, Pennsylvania, Virginia,* West Virginia

Existing Partnerships:

Appalachian Forest Renewal Initiative

Appalachian Regional Reforestation Initiative

Enhancing Access to Recreational Activities on Private Forest Lands

Forest recreation is an important asset, meeting public health and recreation needs. It provides a positive image for visitors and supports a vibrant and sustainable natural resource based tourism industry. A well planned, dedicated, and maintained forest recreation system is a key attribute necessary to support a viable and sustainable recreation and tourism industry.

States: Michigan, New York

Opportunities for Partnership, Cooperation, and Projects:

- Despite the lack of States naming this issue as a multi-State priority, every State is involved in recreation-related issues and is interested in expanding access, particularly on private lands. So there is a lot of opportunity on this issue for multi-State partnerships to increase tourism and recreational land use.

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- Diseases specifically referenced for potential multi-State efforts
  - Beech bark disease, sudden oak death, anthracnose disease (sycamore)

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Insect species specifically referenced for potential multi-State efforts

Emerald ash borer, gypsy moth, Asian-longhorned beetle, winter moth, southern pine beetle, Sirex woodwasp

Diseases specifically referenced for potential multi-State efforts

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- Insect species specifically referenced for potential multi-State efforts
  - Emerald ash borer, Asian-longhorned beetle
- Diseases specifically referenced for potential multi-State efforts
  - Dutch elm disease, bacterial leaf scorch

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  - Emerald ash borer, gypsy moth, Asian-longhorned beetle
- Diseases specifically referenced for potential multi-State efforts
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- Insect species specifically referenced for potential multi-State efforts
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- Insect species specifically referenced for potential multi-State efforts
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- Diseases specifically referenced for potential multi-State efforts
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- Diseases specifically referenced for potential multi-State efforts
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Diseases specifically referenced for potential multi-State efforts

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